

Title (en)
Vector processing device.

Title (de)
Vektorprozessor.

Title (fr)
Processeur vectoriel.

Publication
EP 0600583 A1 19940608 (EN)

Application
EP 93307222 A 19930914

Priority
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Abstract (en)
A vector processing unit includes a vector unit (100A) having a plurality of operation pipelines and a vector register (12) connected to the plurality of operation pipelines, a scalar unit (400) having a buffer (M3), and a memory unit (300). A memory unit controller (300A), which is connected between the memory unit and the vector unit and between the memory unit and the scalar unit, performs an information transfer in accordance with a serializing process among access requests by using a post instruction and a wait instruction. The access requests sandwiched between the post instruction and the wait instruction are serially carried out whereby the memory unit is serially accessed. A first unit (M1) assigns a post mark to each of access requests of vector store instructions that are issued during a time when the post instruction is being executed, and stops instruction execution of the scalar unit when there is a vector store instruction proceeding to the post instruction. A second unit (M1, M2) detects completion of execution of an access request which proceeds to the post instruction and which does not have the post mark, and causes the scalar unit to start to operate when the above completion is detected. <IMAGE>

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G06F 9/38

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)

- [A] EP 0495165 A2 19920722 - IBM [US]
- [A] EP 0396892 A2 19901114 - NEC CORP [JP]
- [A] EP 0398639 A2 19901122 - FUJITSU LTD [JP]
- [A] EP 0042442 A1 19811230 - FUJITSU LTD [JP]

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